- 1. THIS PLAN SET IS PROVIDED TO SHOW JURISDICTIONAL IMPACTS AND REQUIRED ENVIRONMENTAL CONTROLS ONLY. ENGINEERING DOCUMENTS SHOULD BE CONSULTED TO DETERMINE THE SCOPE AND LOCATION OF ALL OTHER CONSTRUCTION ACTIVITIES. PROPOSED CONSTRUCTION LIMITS OF DISTURBANCE ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR MINIMIZING EARTH DISTURBANCE, AS PRACTICABLE.
- 2. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO START OF WORK, SHALL BE MAINTAINED, AND SHALL REMAIN IN PLACE DURING CONSTRUCTION UNTIL ALL DISTURBED SURFACES ARE STABILIZED. FOLLOWING STABILIZATION, EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED OFF-SITE AND PROPERLY DISPOSED.
- 3. ALL CONSTRUCTION SHALL COMPLY WITH PROJECT SPECIFICATION MANUAL, EVERSOURCE STANDARDS AND SPECIFICATIONS, AND THESE PLANS. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS. INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- A. NEW HAMPSHIRE STORMWATER MANUAL, VOLUMES 1, 2 & 3, DECEMBER 2008. B. NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION MANUAL ON DRAINAGE DESIGN FOR HIGHWAYS, REVISION DATE APRIL 1998. C. NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS (2010). D. EVERSOURCE BEST MANAGEMENT PRACTICES MANUAL (TO BE FURTHER DEVELOPED). E. EVERSOURCE STANDARD SPECIFICATIONS (10-24-2014). E. BEST MANAGEMENT PRACTICES MANUAL FOR UTILITY MAINTENANCE IN AND ADJACENT TO WETLANDS AND WATERBODIES IN NEW HAMPSHIRE (2010)
- 4. EROSION AND SEDIMENTATION CONTROLS SHALL BE APPROPRIATE TO THE SIZE AND NATURE OF THE PROJECT AND TO THE PHYSICAL CHARACTERISTICS OF THE SITE, INCLUDING SLOPE, SOIL TYPE, VEGETATIVE COVER, AND PROXIMITY TO WETLANDS OR SURFACE WATERS.
- 5. THE ENVIRONMENTAL CONTROLS SHOWN ON THESE PLANS MAY NEED TO BE SUPPLEMENTED DUE TO SEASON OF WORK, WORK METHODS PROPOSED, AND ADDITIONAL REQUIREMENTS OF OUTSTANDING PERMITS. REFER TO BMP MANUALS AND ADDITIONAL GUIDANCE DOCUMENTS, AS NEEDED.
- 6. TEMPORARY STONE CONSTRUCTION ENTRANCES WILL BE USED AT ALL POINTS OF CONSTRUCTION INGRESS/EGRESS FROM PUBLIC AND PRIVATE ROADWAYS IN ACCORDANCE WITH EVERSOURCE BMPS AND/OR THE BMP MANUAL.
- 7. THE SELECTED CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING, AS REQUIRED, AT POINTS OF INGRESS/EGRESS FROM PUBLIC AND PRIVATE ROADWAYS IN ACCORDANCE WITH THE NPDES CONSTRUCTION GENERAL PERMIT.

- 8. SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR CERTIFYING THAT ALL EQUIPMENT ON THE PROJECT IS CLEAN OF INVASIVE SPECIES PRIOR TO ARRIVING ONSITE. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR CLEANING EQUIPMENT AS IT IS MOVED WITHIN THE PROJECT TO REDUCE THE RISK OF SPREADING INVASIVE PLANT SEEDS AND FRAGMENTS.
- 9. SWAMP MATTING SHOWN ON THE PLANS REPRESENTS THE SQUARE FOOTAGE AND ALIGNMENT OF MATTING WHICH IS REQUIRED AND HAS BEEN APPROVED BY THE REGULATORS. ADDITIONAL LAYERS OF MATS MAY BE REQUIRED AT CERTAIN LOCATIONS. ANY INCREASE IN THE NUMBER, CHANGE IN ALIGNMENT, OR DECISION NOT TO USE SWAMP MATS MUST BE APPROVED BY AN AUTHORIZED REPRESENTATIVE OF THE PERMITTEE(S) AND, AS APPROPRIATE, REGULATORS.

 10. SPAN STREAMS OR DRAINAGE SWALES WITH TEMPORARY
- 10. SPAN STREAMS OR DRAINAGE SWALES WITH TEMPORARY BRIDGE OR SWAMP MATS THAT ARE FREE OF SOIL AND DEBRIS. PROTECT ALL EXISTING CULVERTS ENCOUNTERED ALONG ACCESS ROADS WITHIN THE ROW.
- 11. THE SELECTED CONTRACTOR IS RESPONSIBLE FOR INSTALLING WATERBARS AND OTHER SIMILAR MEASURES TO PREVENT CONCENTRATED RUN-OFF.
- 12. ANY EXCAVATED MATERIAL SHALL BE PLACED OUTSIDE OF JURISDICTIONAL AREAS OR REMOVED FROM THE SITE.
- 13. IF DEWATERING IS REQUIRED, DEWATERING BASINS SHALL BE PLACED IN UPLANDS AREAS AND DISCHARGE WATER INTO UPLAND AREAS.
- 14. AREAS OF SOIL DISTURBANCE SHALL BE STABILIZED FOLLOWING CONSTRUCTION IN ACCORDANCE WITH THE APPLICABLE BMP MANUALS (SEE ABOVE).
- 15. PLAN EARTH DISTURBANCE AND GRADING ACTIVITIES TO MINIMIZE THE AREA OF SOIL EXPOSED AT ONE TIME, AS WELL AS THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING.
- 16. PROTECT EXISTING VEGETATION AND NATURAL FOREST COVER WHERE POSSIBLE.
- 17. PRESERVE AND MAINTAIN BUFFER STRIPS OF UNDISTURBED VEGETATION BETWEEN CONSTRUCTION AREAS AND ENVIRONMENTALLY VULNERABLE AREAS SUCH AS WATERCOURSES, PONDS, AND WETLANDS.
- DIVERT CLEAN WATER AWAY FROM THE IMMEDIATE
 CONSTRUCTION AREA TO REDUCE THE THREAT OF EROSION.
 DISPERSE CLEAN STORMWATER TO UNDISTURBED, VEGETATED, FLAT OR MODERATE-SLOPED, SURFACES WHEREVER POSSIBLE, RATHER THAN CONCENTRATE IT INTO CHANNELS.

- 20. FALL AND WINTER EROSION CONTROL MEASURES MUST BE UPGRADED AND REFINED TO PROTECT THE SITE FROM SPRING RUNOFF AND SNOWMELT.
- 21. ANY SIGN OF RILL OR GULLY EROSION SHOULD BE IMMEDIATELY INVESTIGATED AND REPAIRED AS NEEDED.
- 22. PERIODICALLY INSPECT SEEDED SLOPES FOR RILLS OR OTHER SIGNS OF EROSION. FILL THESE AREAS SLIGHTLY ABOVE THE ORIGINAL GRADE, RESEED, AND MULCH AS SOON AS POSSIBLE, BUT NO MORE THAN THREE DAYS FOLLOWING INSPECTION.
- 23. TEMPORARY STABILIZATION MEASURES SHOULD BE INSPECTED AT LEAST ONCE PER WEEK DURING THE CONSTRUCTION PERIOD, OR AS STIPULATED BY THE APPLICABLE PERMITS, UNTIL ALL EXPOSED SOILS HAVE BEEN PERMANENTLY STABILIZED.
- 24. IN ADDITION TO REGULAR INSPECTIONS, THE PROJECT SITE SHOULD BE INSPECTED DURING OR WITHIN 24 HOURS OF ANY RAIN EVENT IN WHICH ½ INCH OF PRECIPITATION OR MORE FALLS WITHIN A 24-HOUR PERIOD.
- 25. ALL AREAS OF EXPOSED OR DISTURBED SOIL SHOULD BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 45 DAYS FROM THE TIME OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES, THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT, OR AN INDEPENDENT MONITOR.
- 26. ALL AREAS OF EXPOSED OR DISTURBED SOIL SHOULD BE PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN THREE DAYS FOLLOWING FINAL GRADING.
- 27. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION. FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED. EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.
- 28. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHOULD BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE FINISHED GRADING AND PROTECTED FROM EROSION.
- 29. USE SLOPE BREAKS, SUCH AS DIVERSIONS, BENCHES, OR CONTOUR FURROWS AS APPROPRIATE, TO REDUCE THE LENGTH OF CUT-AND-FILL SLOPES TO LIMIT SHEET AND RILL EROSION AND PREVENT GULLY EROSION. ALL BENCHES SHOULD BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
- 30. STABILIZE ALL GRADED AREAS WITH VEGETATION, CRUSHED STONE, COMPOST BLANKET, OR OTHER GROUND COVER AS SOON AS GRADING IS COMPLETED OR IF WORK IS INTERRUPTED FOR 21 WORKING DAYS OR MORE. USE MULCH OR OTHER APPROVED METHODS TO STABILIZE AREAS TEMPORARILY WHERE FINAL GRADING MUST BE DELAYED.
- 31. ALL GRADED AREAS SHOULD BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
- 32. MOISTEN EXPOSED SOIL SURFACES PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

- 33. AVOID EXCESSIVE APPLICATION OF WATER THAT WOULD RESULT IN MOBILIZING SEDIMENT AND SUBSEQUENT DEPOSITION IN NATURAL WATERBODIES.
- 34. WITHIN 100' OF STREAMS, WETLANDS AND IN LAKE WATERSHEDS, TEMPORARY MULCH SHOULD BE APPLIED WITHIN 7 DAYS OF EXPOSING SOIL OR PRIOR TO ANY STORM EVENT.
- 35. APPLICATION RATE SHOULD BE 2 BALES (70-90 POUNDS) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90 % OF THE GROUND SURFACE.
- 36. WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON), IT SHOULD BE APPLIED TO A DEPTH OF FOUR INCHES (150-200 POUNDS OF STRAW PER 1000 SQUARE FEET, OR DOUBLE STANDARD APPLICATION RATE).
- 37. WHEN USING EROSION CONTROL MIX, THE BARRIER MUST BE A MINIMUM OF 12" HIGH, AS MEASURED ON THE UPHILL SIDE OF THE BARRIER, AND A MINIMUM OF TWO FEET WIDE.
- 38. TEMPORARY AND PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH THE PLANTING PLANS TO BE DEVELOPED LATER, NH DES STORMWATER MANUAL AND THE APPROVED NATIVE SEED MIX SPECIFIED IN THE FINAL RESTORATION SPECIFICATIONS TO BE DEVELOPED LATER
- 39. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION, AND COMPLETE PERMANENT SEED STABILIZATION DURING THE NEXT GROWING SEASON IF NECESSARY.
- 40. FOLLOW SENSITIVE RESOURCE AVOIDANCE AND MINIMIZATION METHODS AS SPECIFIED IN THE WETLAND MITIGATION PLAN OR PERMIT CONDITIONS AS APPROPRIATE IN APPLICABLE LOCATIONS DEPICTED BY THE SENSITIVE RESOURCE BAR ON PLANS.
- 41. AVOID THE SPREAD OF INVASIVE PLANTS BY USING SOIL AND SEED MIXES CERTIFIED AS WEED FREE BY THE SUPPLIER; USING ONLY STRAW BALES AND MULCH, NOT HAY; PERFORMING REGULAR INSPECTION AND CLEANING OF CONSTRUCTION EQUIPMENT AND VEHICLES ON THE ROW AS APPROPRIATE WHERE INVASIVE SPECIES ARE PRESENT; MECHANICALLY REMOVING INVASIVE SPECIES FROM WORK AREAS DURING CONSTRUCTION (PREFERABLY WHEN DORMANT OR PRIOR TO SEED SET) AND DISPOSING PROPERLY







Date: 02/19/2016

NHDES Wetlands & US Army Corps of Engineers Section 404/10 Permit Application Plans

THE NORTHERN PASS PROPOSED ROUTE

Jurisdictional Impact Type and Amount

Wetland / Temporary Permanent Impact (sq ft)

Waterbody

Temporary Impact (sq ft)

Impact (sq ft)

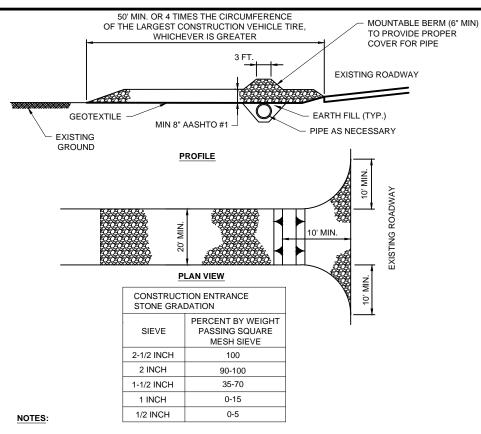
Lin Forested Wetlands

Wetlands

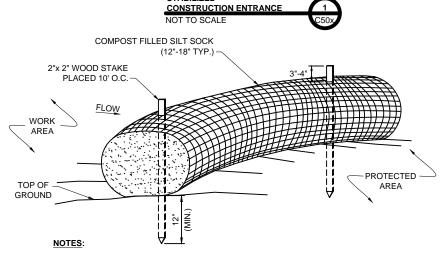
Uplands w/in 100 of Streams

Uplands w/in 100 of Streams

Volos



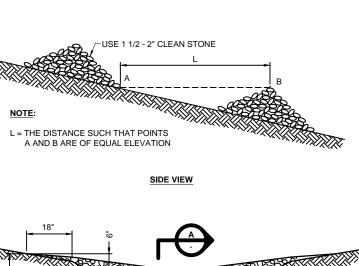
- 1. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
- 2. WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 3. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

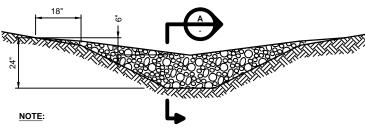


STABILIZED

- 1. SILT SOCK SHALL BE FILTREXX TM SILTSOXX TM OR APPROVED EQUIVALENT.
- 2 SEE SPECIFICATIONS FOR SOCK SIZE AND COMPOST FILL REQUIREMENTS.
- SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS NEEDED.
- COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.

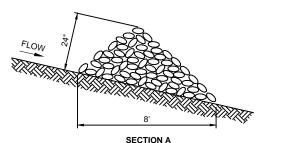


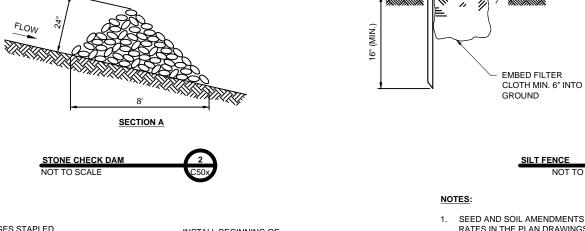


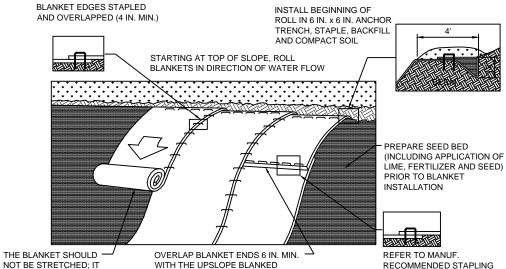


KEY STONE INTO CHANNEL BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 18" TO PREVENT FLOW AROUND THE DAM.

VIEW LOOKING UPSTREAM







WITH THE UPSLOPE BLANKED OVERLYING THE DOWNSLOPE BLANKET (SHINGLE STYLE). STAPLE SECURELY.

MUST MAINTAIN GOOD

SOIL CONTACT

RECOMMENDED STAPLING PATTERN FOR STEEPNESS AND LENGTH OF SLOPE BEING BLANKETED

EROSION CONTROL BLANKET



NOTES:

PERSPECTIVE VIEW NOT TO SCALE

36" MIN FENCE

POST (10' MAX.

CLOTH OVER

UNDISTURBED GROUND

WOVEN WIRE FENCE (14 1/2

GA. MIN., MAX 6" MESH

SPACING) WITH FILTER

C. TO C.)

10' MAX CENTER TO CENTER

WOVEN WIRE

FENCE (14 1/2

MESH SPACING)

GA., MAX. 6"

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.

36" MIN. FENCE

POSTS DRIVEN

16" INTO GROUND

- 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN
- EACH OTHER THEY SHALL BE OVER- LAPPED BY SIX INCHES AND FOLDED.
- 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER "T" OR "U"

TYPE OR 2" HARDWOOD.

FENCE: WOVEN WIRE 14 1/2 GA. 6" MAX. MESH OPENING.

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR

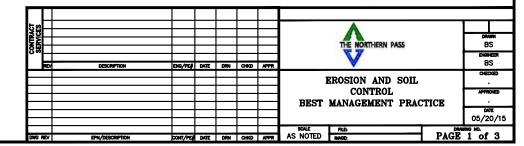
APPROVED EQUAL.

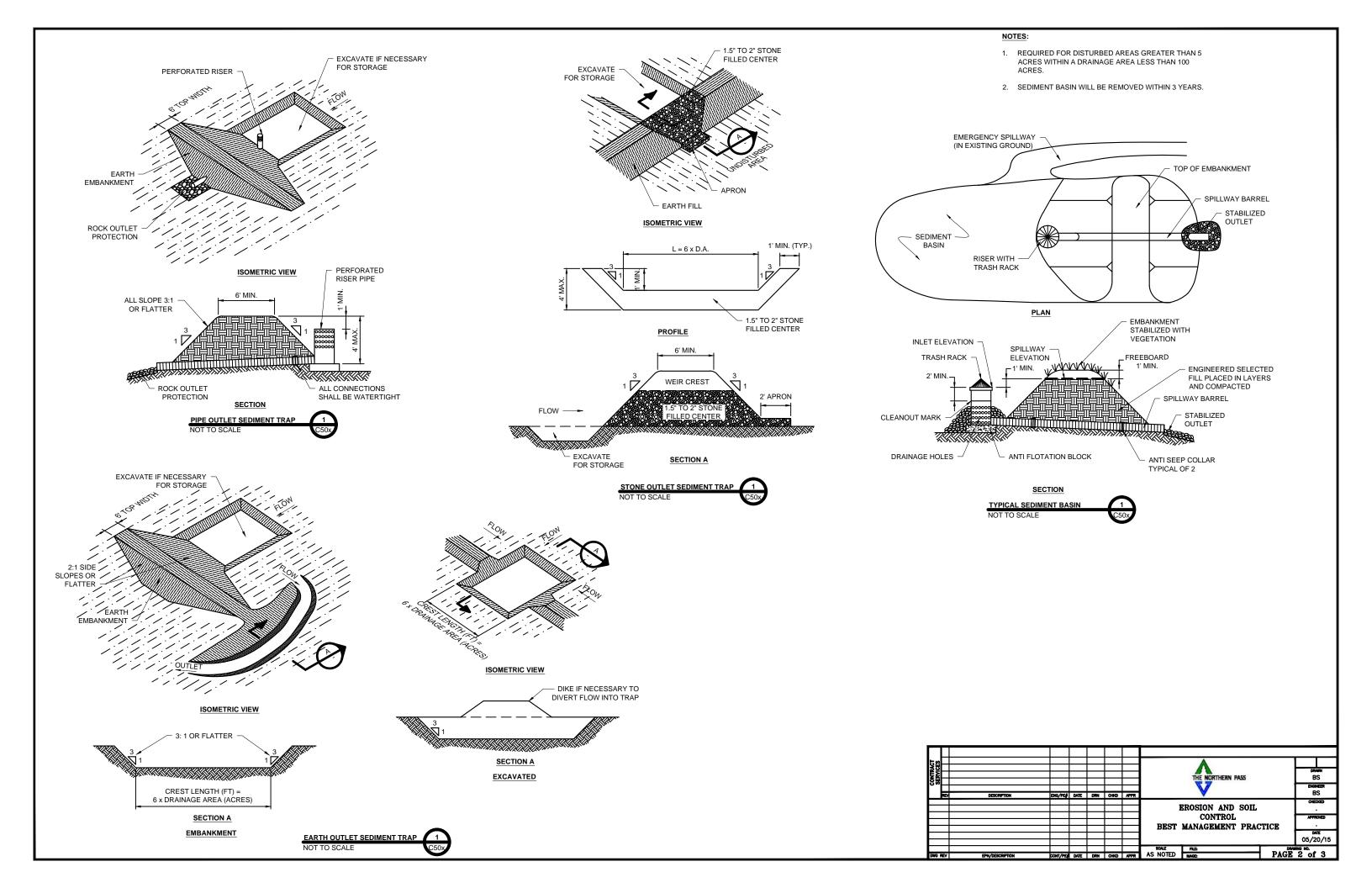
PREFABRICATED GEOFAB, ENVIROFENCE,

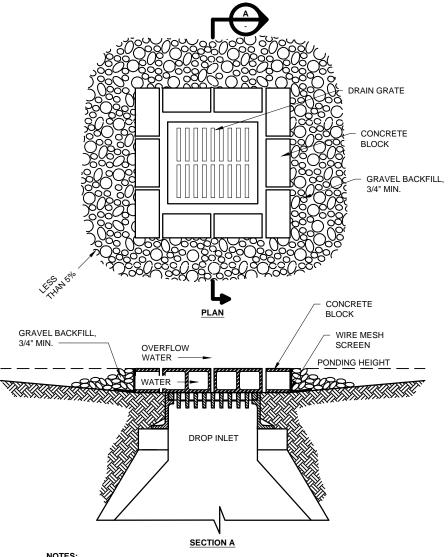
UNIT: OR APPROVED EQUAL

SILT FENCE

- SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
- PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
- BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH
- THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

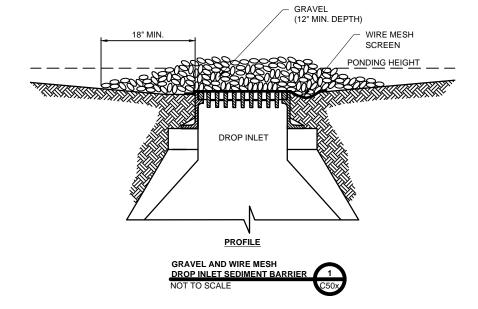






- DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
- 2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
- 3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.





CONTRACT								
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